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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/20/2005

Martin Brodt

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10/28/2008

PATENT CENTRAL LLC

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EXAMINER

YANG, JIE

ART UNIT

PAPER NUMBER

1793

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/527,721	<b>Applicant(s)</b> BRODT ET AL.	
	<b>Examiner</b> JIE YANG	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claim 1 is amended; claim 13 is added as a new claim; and claims 1-13 are pending in application.

### ***Claim Objections***

Claim 13 is objected to because of the following informalities: the number of the final step in the instant claim 13 should be (V) instead of (IV). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1, 6, 10, 11, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Tjoelker et al (US 6,918,224 B2, thereafter US'224).

US'224 is applied on claims 1, 6, 10, and 11 for the same reason as stated in the office action of 2/21/2008.

Regarding the amended limitations in the instant claim 1, US'224 teaches a suitable material for the workpiece is a hardenable steel, i.e. quenchable steel (Col.4, lines 18-19 of US'224), which reads on the hot-workable steel as recited in the step (I) of the instant claim. US'224 teaches initially forcefully cold formed, such as by stamping and/or rolling

Art Unit: 1793

techniques into the desired configuration (Col.4, lines 14-26 of US'224), which reads on the limitation of cold forming a part blank having a three-dimensional shape and outer contour corresponding approximately to that of the finished product from the sheet blank as recited in the step (II) of the instant claim.

Regarding the newly added claim 13, which includes the similar limitations of claim 1 except the steps of (IV) heating the trimmed part blank to a temperature above the structural transformation temperature in the austenite state; and (V) final shaping the heated product of step (IV) and rapidly cooling the trimmed part blank in a hot-forming tool to set the material structure. US'224 teaches sufficiently induction heating the target to pre-selected temperature, then quenching to obtain desired hardening effect (Col.4, line 54 to Col.5, line 20 of US'224), which reads on the heating and rapid cooling limitations in the instant claim. Because it is a common knowledge to heat a quenchable steel to the austenite state, then quenching it to obtain a hardening effect, the sufficiently heating taught by US'224 reads on the limitation of heating to a temperature above the structural transformation temperature in the austenite state as recited in the instant claim. US'224 further teaches during cooling the coolant is rapidly and

Art Unit: 1793

suddenly applied through nozzles and directed onto the impact beam to quench the same while it is still fixtured or retained in fixture (Col.5, lines 11 to 20 of US'224), which reads on the limitation of rapidly cooling the blank in a hot-forming tool as recited in the instant claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US'224 as applied on claim 1, and further in view of term definition for "stamping" on Wikipedia ([www.wikipedia.org](http://www.wikipedia.org)).

US'224 is applied on claims 2-4 and 12 for the same reason as stated in the office action of 2/21/2008.

Claims 5, 7-9, are rejected under 35 U.S.C. 103(a) as being unpatentable over US'224 as applied on claim 1, and further in view of Bronsema et al (US 5,669,992, thereafter US'992)

US'224 is applied on claims 5 and 7-9 for the same reason as stated in the office action of 2/21/2008.

### ***Response to Arguments***

Applicant's arguments, see "applicant arguments/remarks", filed 7/23/2008, with respect to the rejection(s) of claim(s) under 35 U.S.C. 103(a) have been fully considered but they are not persuasive.

Regarding the arguments related to the amended features in the instant claims, the Examiner's position is stated as above.

In the remark, the Applicants argue:

a) regarding claims 1, 6, 10, and 11, Tjoelker et al (US'224) do not teach press hardening in a hot forming tool, and thus can not teach or suggest the advantages associated with the present inventive combination (a) cold forming to a near net shape followed by (b) press-hardening in a hot forming tool. Tjoelker et al (US'224) merely teach cold forming followed by heat treating, which does not allow for high dimensional accuracy of the heat-treated part. And furthermore Tjoelker et al (US'224) is not possible to press-harden the whole workpiece, but only the central portion of the beam;

b) regarding claims 2-4 and 12, Tjoelker et al (US'224) teach cold forming, Tjoelker et al (US'224) teach against hot press forming. Wikipedia does not come close to the present invention since there remains an absence of teaching of hot press forming;

Art Unit: 1793

c) regarding claims 5, and 7-9, Bronsema et al nowhere teach hot press forming as required in the present claims 1 and 13, thus the combination of references does not come close to the present invention.

In response,

Regarding the arguments a)—c), the Examiner disagrees with the Applicants arguments. Tjoelker et al (US'224) teaches prior to heat treatment, the cold formed beam workpiece is fixtured in a suitable clamping device and the clamping elements allow the respective flange to move only longitudinally, but not vertically or torsionally, to accommodate beam expansion and contraction due to temperature increases and decreases during the induction heat treating process, but prevent significant vertical or torsional distortion (Col.4, lines 27 to 52 of US'224). The clamping device of US'224 is one kind of hot-forming tools because it limits the motion of the working pieces; and the limitations of clamping devices will lead to the press hardening on the working pieces during the temperature increases and decreases as recited in the instant claims 1 and 13. The Examiner further notices there are no limitations to press-harden the whole workpiece as assumed in the instant arguments. The detail discussions for the rejections for the instant claims and motivation for combining the prior arts can refer to the previous office action marked 2/21/2008.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 1793

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jie Yang whose telephone number is 571-2701884. The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-2721244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business



Application/Control Number: 10/527,721

Page 8

Art Unit: 1793

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JY

/Roy King/

Supervisory Patent Examiner, Art Unit 1793